

Rulemaking Plan  
CODES AND STANDARDS

10 CFR Part 50.55a

Regulatory Requirements

The American Society of Mechanical Engineers (ASME) develops and publishes the *Boiler and Pressure Vessel Code* (BPV Code), which contains requirements for construction and inservice inspection (ISI) of nuclear power plant components, and the *Code for Operation and Maintenance of Nuclear Power Plants* (OM Code), which contains requirements for inservice testing (IST) of pumps and valves. New editions of the ASME Code are issued every 3 years. Addenda to the editions are issued annually except in years when a new edition is issued. The ASME Code is a national consensus standard developed by participants with broad and varied interests. All interested parties participate in the development of this standard.

The National Technology Transfer and Advancement Act of 1995, Pub. L. 104-113, requires agencies to use technical standards that are developed or adopted by voluntary consensus standards bodies unless the use of such a standard is inconsistent with applicable law or is otherwise impractical. It has been the policy of the Commission to periodically update § 50.55a to Title 10 of the *Code of Federal Regulations* (10 CFR 50.55a) to keep current the ASME Code editions and addenda incorporated by reference. Section 50.55a was most recently updated on September 26, 2002 (67 FR 60520) to incorporate by reference the 1998 Edition of the ASME BPV and OM Codes, up to and including the 2000 Addenda.

New applicants for a nuclear power plant submitting an application for a construction permit under 10 CFR Part 50 or a design certification under 10 CFR Part 52 are required to use the most recent edition and addenda of Section III, Division 1, of the ASME BPV Code incorporated by reference in 10 CFR 50.55a for the design and construction of the reactor coolant pressure boundary and Quality Group B and C components. Licensees of currently operating nuclear power plants may voluntarily update their construction Code of Record for any system or component to a later edition and addenda of Section III, Division 1, of the ASME BPV Code incorporated by reference in 10 CFR 50.55a at any time.

New applicants for a nuclear power plant submitting an application for an operating license under 10 CFR Part 50 or a combined operating license under 10 CFR Part 52 are required to use the most recent edition and addenda of Section XI, Division 1, of the ASME BPV Code incorporated by reference in 10 CFR 50.55a for the preservice inspection and ISI of nuclear power plant components. Licensees of currently operating nuclear power plants are required to use the most recent edition and addenda Section XI, Division 1, of the ASME BPV Code incorporated by reference in 10 CFR 50.55a when performing the required 120-month update of their ISI programs.

New applicants for a nuclear power plant submitting an application for an operating license under 10 CFR Part 50 or a combined operating license under 10 CFR Part 52 are required to use the

most recent edition and addenda of the ASME OM Code incorporated by reference in 10 CFR 50.55a for the IST of nuclear power plant pumps and valves. Licensees of currently operating nuclear power plants are required to use the most recent edition and addenda of the ASME OM Code incorporated by reference in 10 CFR 50.55a when performing the required 120-month update of their IST programs.

### Regulatory Options

The staff will conduct routine 10 CFR 50.55a updates that incorporate by reference newer editions and addenda of Section III, Division 1, and Section XI, Division 1, of the ASME BPV Code and the ASME OM Code at approximately 2 to 3 year intervals. The NRC's longstanding policy has been to update 10 CFR 50.55a to keep current the ASME Code editions and addenda incorporated by reference. This is codified in 10 CFR 50.55a, which requires licensees to revise their ISI and IST programs every 120 months to the latest edition and addenda of Section XI of the ASME BPV Code and the ASME OM Code incorporated by reference into 10 CFR 50.55a that are in effect 12 months prior to the start of a new 120-month ISI and IST interval. Thus, when the NRC endorses a more recent version of the Code, it is implementing this longstanding policy and requirement.

Rulemaking plans normally identify several regulatory options with respect to how to accomplish the desired rulemaking and best meet the agency's performance goals of maintaining safety, increasing public confidence, reducing unnecessary regulatory burden, and making NRC activities and decisions more effective, efficient, and realistic. However, regulatory options are not addressed in this rulemaking plan because the Commission's staff requirements memorandum dated April 13, 2000, directed the staff to follow the NRC's longstanding policy of updating 10 CFR 50.55a to incorporate by reference newer editions and addenda to the ASME BPV and OM Codes. If, in the future, the staff determines that it is not appropriate to conduct routine 10 CFR 50.55a updates, the staff will submit a rulemaking plan with regulatory options to the Commission for its consideration.

### Impact on Licensees

The ASME Code has been revised on a continuing basis over the years to provide updated provisions for the design, construction, and ISI of pressure boundary components and the testing of pumps and valves in nuclear power plants. Typically, the subsequent editions and addenda of the ASME Code contain many new and revised Code provisions. Some new and revised Code provisions have increased requirements and others have decreased requirements, but overall, the staff considers the evolution of the ASME Code to result in a net improvement in the provisions for constructing and inspecting components and testing pumps and valves.

The costs for licensees to update their ISI and IST programs to more recent editions and addenda of the ASME Code are difficult to quantify; neither the NRC staff nor ASME performs detailed quantified cost/benefit analyses of the individual changes to the ASME Code, and industry cost estimates have not always been consistent. For example, when commenting on the *Federal Register* notice dated April 27, 1999 (64 FR 22580), the Nuclear Energy Institute estimated that it may cost a licensee up to \$1.5 million every 10 years to update ISI and IST programs, to revise procedures, and to train personnel. However, estimates from ASME indicated that the costs were significantly lower (\$200,000 to \$300,000 every 10 years). The

staff notes that, in some instances, implementing a new edition of the ASME Code can result in cost savings that offset the implementation costs. For example, more recent editions of the ASME Code permit the use of new, more cost-effective methods for construction, ISI, and IST.

#### Benefits

The proposed amendment is expected to maintain the overall protection of public health and safety while updating the rules to be consistent with the latest methods for construction, ISI, and IST specified by the ASME Code. Timely endorsement of newer ASME Code editions and addenda will likely reduce the number of licensee requests to use alternative Code requirements and requests for relief from Code requirements pursuant to 10 CFR 50.55a(a)(3), (f)(5), and (g)(5), thereby improving both NRC staff and licensees' efficiency and effectiveness and reducing unnecessary regulatory burden. The proposed amendment should also increase public confidence as a result of the use of the most up-to-date technologies and methods for design, construction, ISI, and IST of nuclear power plants components.

#### Office of the General Counsel (OGC) Legal Analysis

The proposed rule would amend 10 CFR 50.55a to endorse newer editions of Section III of the ASME BPV Code, Section XI of the ASME BPV Code, and the ASME OM Code on a continuing basis. The Section III requirements would apply to the construction of new nuclear power plants, while the requirements in Section XI and in the OM Code would apply to ISI and IST of currently operating nuclear power plants. Consistent with existing requirements, licensees would be required to revise their ISI and IST programs at the end of their current 120-month interval to the ASME Code edition and addenda incorporated by reference 12 months prior to the start of the next 120-month interval. At this time, OGC has not identified any legal objections to this rulemaking.

The staff will continue to obtain approval for incorporation by reference of the relevant editions and addenda of the ASME BPV and OM Codes from the Office of the Federal Register as required by 1 CFR Part 51. The Commission's proposal to endorse an industry consensus standard is consistent with the intent of the National Technology Transfer and Advancement Act of 1995. Nonetheless, in accordance with the law and Office of Management and Budget (OMB) Circular A-119, the Statement of Considerations must contain a statement requesting public comment regarding whether there are other national or international consensus standards that could be endorsed as an option to the ASME BPV and OM Codes.

OGC does not believe that the proposed rule will constitute a backfit as defined in 10 CFR 50.109(a)(1). OGC believes that the correct basis for this determination is the same as the basis for previous rulemakings updating 10 CFR 50.55a (67 FR 60520 and 64 FR 51370), namely, that the 120-month updating requirement is a longstanding part of the Commission's regulatory regime and that licensees understood this when they received their operating licenses. Despite this determination, OGC notes that nuclear power plant licensees disagreed with this rationale in their comments on previous 10 CFR 50.55a update rulemakings.

#### Category of Rule

Rulemakings that incorporate by reference later editions and addenda of the ASME Code are not considered "major rules" because they will not cause a major increase in costs for licensees to

update and implement ISI and IST programs, the proposed rule's annual effect on the economy will be less than \$100 million, and these rulemakings will not have a significant adverse effect on licensees' ability to compete with foreign-based utilities. The effect of these rulemakings is expected to be similar to that of the previous rulemakings on 10 CFR 50.55a (67 FR 60520 and 64 FR 51370), in which the NRC determined that the rulemakings were not major rules (having verified its determination with the Office of Information and Regulatory Affairs of OMB).

#### Supporting Documents Needed

Each rule to update 10 CFR 50.55a will require preparation of a regulatory analysis. Each rule will also require preparation of an environmental assessment because no categorical exclusions in 10 CFR 51.22(c) apply to this rulemaking. However, if § 51.22(c) is amended in the future to include a categorical exclusion that applies to this rulemaking, an environmental assessment will no longer be required. Each rule will require preparation of an OMB Clearance Package if the rulemaking significantly changes reporting or recordkeeping requirements.

#### Issuance by the Executive Director for Operations or Commission

Because this action has no significant resource implications and involves no policy issues, this action will be approved and issued for publication by the Executive Director for Operations (EDO) under his delegated authority.

#### Interoffice Management Steering Group

No interoffice management steering group is necessary for this rulemaking.

#### Public/Industry Participation

Although industry comments on routine 10 CFR 50.55a updates are expected, no significant opposition is anticipated. The industry has expressed a desire to have timely regulator approval of new editions and addenda of the ASME Code. In order to expedite this rulemaking, the staff will consider holding public meetings to obtain stakeholder input.

The *Federal Register* notice and environmental assessment for each proposed rule will be dispatched to State Liaison Offices for review and comment. However, this action will no longer be required if § 51.22(c) is amended to include a categorical exclusion that applies to this rulemaking.

#### Resources

The staff estimates resources of approximately 1.5 full-time equivalent positions on an annual basis to review new ASME Code editions and addenda and to conduct periodic rulemakings. These resource estimates are within current budget plans.

NRR Lead:

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Component & Containment Reliability Section  
Mechanical and Civil Engineering Branch  
Division of Engineering

OGC Contact: Geary Mizuno, Senior Attorney

Contractual Assistance: None expected

Schedule

Proposed Rule to EDO      The proposed rule to incorporate by reference the 2001 Edition and 2002 Addenda will be submitted to the EDO approximately 6 months after Commission approval of the rulemaking plan. All subsequent proposed rules will be submitted to the EDO every 2 to 3 years.

Publish Proposed Rule      1.5 months later

Final Rule to EDO      Approximately 16 months after proposed rule is published in the *Federal Register*

Publish Final Rule      1.5 months later